

County
Request for Proposals
Radio System Subscriber Units

County requests competitive proposals from vendors to furnish, program and install subscriber radios and train users to operate on and interoperate with the Arkansas Wireless Information Network. This solicitation includes mobile, portable, and desktop control station type units and associated training and accessories. Any purchase order(s)/contract(s) resulting from this solicitation shall serve as the instrument for County and all first response public safety agencies within the county to make purchases in quantities as required at the proposed unit prices for a period of 18 months commencing on the date of the award.

For the proposal to be considered, the proposer must 1) respond to the County's terms and conditions stated in Exhibit A, 2) meet or exceed the specifications in Exhibit B, and 3) prepare a cost proposal based on the cost forms outlined in Exhibit C.

Proposals shall, at a minimum, include:

1. A section by section response to all terms and conditions in Exhibit A stating one of the following:
 - Accepted (provision understood and will be met).
 - Not Accepted (provision will not be met – provide specific proposed wording changes). *Submittal of proposer's "standard" printed terms and conditions will not be accepted nor considered as specific exceptions.*
2. A statement of work describing the manner in which the proposer will meet or exceed the requirements contained in this request and each of the specifications included in Exhibit B. Supplemental data sheets/specifications for all proposed equipment.
3. A comprehensive cost proposal based upon the format in Exhibit C.

Proposals shall be submitted in written form with photocopies and one (1) electronic (CD) copy in Adobe Acrobat format.

Proposals shall be submitted by PM on _____, 20?? to:

SUBMITTAL NAME AND ADDRESS

Any questions related to this request for proposal shall be directed to NAME, PHONE NUMBER, AND EMAIL ADDRESS.

Exhibit B Specifications

1. System Description

The State of Arkansas has contracted with Motorola for the implementation of a new statewide radio system referred to as the Arkansas Wireless Information Network (AWIN). This public safety radio system, when implemented, will serve the wireless communications of various state agencies as well as provide interoperable communications at the county command and control level. Command and control level personnel are identified by each county and are generally defined as the upper level administrators that direct departmental resources in the event of an emergency situation.

AWIN is an ASTRO ® 25 Integrated Digital Trunked Network. ASTRO ® 25 is Motorola's Project 25 (P25) compliant trunked narrowband digital wireless communication system and is capable of operating in both the 700 and 800 MHz bands. The AWIN system is based upon Motorola's 6.5 Integrated Voice and Data (IV&D) architecture. The first phase of AWIN encompasses seventy-one (71) Motorola QUANTAR IntelliSite Repeater RF sites distributed throughout Arkansas. These remote RF sites are interconnected by a state owned and operated digital microwave system. Later phases of the project may include coverage enhancements and system capability additions.

2. General Requirements

All subscriber radio units shall meet the following general requirements.

- Operate in conventional analog FM mode on the 800 MHz NPSPAC Interoperability Frequencies.
- Operate in the FCC 700 and 800 MHz bands.
- Comply with the P25 Standard and compatible with the AWIN system.
- Completely field programmable.
- Newly manufactured latest model with latest version software produced by the manufacturer.

3. Basic Operation

All subscriber equipment shall provide the following basic operational features for voice transmissions on the AWIN system

- Talkgroup Call
- Unit to Unit Call

- Unit Identification (PTT ID)
- Emergency Call/Declaration
- Busy Queuing and Call Back

4. Warranty

The proposer shall provide a three (3) year warranty to include parts and labor on all equipment and accessories purchased as part of this agreement. The warranty shall commence upon delivery, installation, cutover of all units and training of all users.

5. Equipment Delivery

The proposer shall manufacture and deliver all equipment and accessories to the designated installation location(s) as coordinated in advance with the purchaser. Upon delivery of products, the proposer shall inventory and document the condition of all items. Inventory documentation shall also include make, model, and serial number of all delivered items for subsequent submittal to the County.

6. Programming

The proposer shall prepare programming templates for all subscriber units as directed and approved by the purchaser(s). The development of the programming templates shall be coordinated with the Arkansas Department of Information Systems to ensure adherence to programming policies and proper consideration for intra-county and roaming operations. The templates shall serve as the basis for the one (1) time programming of all radios.

7. Mobile Radio Removal and Installation

The proposer shall completely remove existing mobile radios as directed by the purchaser(s). These radios shall be inventoried and delivered to the purchaser(s) designated storage location.

The proposer shall confirm the proper operation of and install mobile radio units in the vehicles and equipment designated by the purchaser(s) in the configurations approved by the purchaser(s). Radio installation shall include all labor and incidental equipment for a complete installation. Units shall be installed at the purchaser's facilities in a manner mutually agreeable to the proposer and purchaser(s). The proposer shall maintain a complete inventory of vehicle installations in a form suitable to the purchaser(s).

8. Portable Radio Distribution

The proposer shall coordinate the distribution of portable radios and accessories with the purchaser(s). Upon delivery of the units, the proposer shall confirm the proper operation of each unit and maintain a complete inventory of radios/recipients in a form suitable to the purchaser(s).

9. Control Station Installation

The proposer shall confirm the proper operation of and install control station units in the locations designated by the purchaser(s) in the configurations approved by the purchaser(s). Control station installation shall include all labor and incidental equipment for a complete installation. The proposer shall maintain a complete inventory of control station installations in a form suitable to the purchaser(s).

The purchaser(s) will provide installation space, power outlet and ground location within ten (10) ft., and any wall/roof penetration required for antenna installation.

10. Operator Training

The proposer shall provide operator training for all types of subscriber units as requested by the purchaser(s). The proposer shall provide thorough instruction in a classroom environment related to the operation and proper use of mobiles, portables, and control stations to all users. Operator training classes shall be conducted at the purchasers' premises and shall include, at a minimum, the following.

- AWIN System Overview
- General radio operation.
- Description of all programmed features and functions.
- Operation instructions for all programmed features and functions.
- Hazards and safety measures.

Training requirements are as follows:

Mobile Radio - Total Students in Classes

Portable Radio - Total Students in Classes

Control Stations - Total Students in Classes

11. Mobile Radio Specifications

The proposer shall furnish mobile radios and accessories as specified for any or all of the following tiers. For information only, an estimated quantity for each tier is provided.

Mobile Unit – Dash and Remote Mount:

- a. Frequency Synthesized
- b. 100 % solid-state
- c. Adhere to MIL Spec 810C
- d. Operate from a nominal +12VDC
- e. Unit Identification on PTT
- f. Transmitter time-out timer
- g. On/Off Switch
- h. Volume Control
- i. Indicator for Power On, Transmit, and Group Selected
- j. Palm microphone with Coil Cord
- k. Loudspeaker
- l. Emergency Button
- m. Reverse Polarity Protection and Fusing
- n. All necessary mounting hardware (remote or dash mount)
- o. Mobile antenna with cable

Mobile Unit Tiers

FEATURE	LOW-TIER	MID-TIER	HIGH-TIER
Time-Out Timer	Required	Required	Required
Talk-around	Required	Required	Required
Individual Call	Not Required	Required	Required
Private Call	Not Required	Required	Required
Emergency Operation	Required	Required	Required
Telephone Interconnect	Receive Only	Receive Only	Required
Group Scan	Not Required	Not Required	Required
PC Programmable	Required	Required	Required
10 Character Alphanumeric Display	Not Required	Required	Required
Conventional Channels	8	16	16
Number of Groups	48	48	64
DTMF Pad	Not Required	Not Required	Required
Noise Canceling Microphone	Required	Required	Required
External Speaker	Not Required	Required	Required
Backlighting of Display/Dimmer Control	Not Required	Required	Required
Encryption Capable	Required	Required	Required
Memory Retention/Power Off	Required	Required	Required
Estimated Quantity – Dash/Remote			
Estimated Quantity – Removal of Existing Radios			

12. Portable Radio Specifications

The proposer shall furnish portable radios and accessories as specified for any or all of the following tiers. For information only, an estimated quantity for each tier is provided.

- a. Weatherproof housing
- b. Belt Case
- c. One Hand operation
- d. Antenna
- e. Preprogrammed trunking failure operation
- f. EEPROM programming
- g. Solid State Construction
- h. Adhere to MIL Spec 810D
- i. Volume Control
- j. On-Off Switch
- k. Sealed PTT Switch
- l. Time Out Timer
- m. Emergency Switch

Portable Unit Tiers

FEATURE	LOW-TIER	MID-TIER	HIGH-TIER
Time-Out Timer	Required	Required	Required
Talk-around	Required	Required	Required
Individual Call	Not Required	Required	Required
Private Call	Not Required	Required	Required
Emergency Call	Required	Required	Required
Telephone Interconnect	Receive Only	Receive Only	Required
Group Scan	Not Required	Not Required	Required
IBM-PC Programmable	Required	Required	Required
8 Character Alphanumeric Display	Not Required	Required	Required
Conventional Channels	8	16	16
Number of Groups	48	48	64
DTMF Pad	Not Required	Not Required	Required
Noise Canceling Microphone	Required	Required	Required
Case, Straps, Belt Loops	Required	Required	Required
Backlighting of Display/Dimmer Control	Not Required	Required	Required
Encryption Capable	Required	Required	Required
Rapid Rate Desk Charger	Required	Required	Required
High Performance Battery (2 per unit)	Required	Required	Required
Estimated Quantity			
Optional Rapid Rate Gang Charger		? Total Required	

13. Control Station Specifications

The proposer shall furnish control station radios and accessories as specified for any or all of the following tiers. For information only, an estimated quantity for each tier is provided.

- a. Frequency Synthesized
- b. 100 % solid state
- c. Power Supply
- d. PTT Identification
- e. Transmitter time out timer
- f. On/Off Switch
- g. Volume Control
- h. Indicator for Power On, Transmit, and Group Selected
- i. Gooseneck microphone
- j. Loudspeaker
- k. "Emergency" Button
- l. All necessary mounting hardware
- m. Antenna with cable

Control Station Tiers

FEATURE	LOW-TIER	HIGH-TIER
Time-Out Timer	Required	Required
Talk-around	Required	Required
Individual Call	Not Required	Required
Private Call	Not Required	Required
Emergency Call	Required	Required
In-Bound Emergency Decode	Receive Only	Receive Only
Group Scan	Not Required	Not Required
IBM-PC Programmable	Required	Required
8 Character Alphanumeric Display	Not Required	Required
Conventional Channels	16	16
Number of Groups	32	32
Display	Not Required	Not Required
Encryption Capable	Required	Required
Estimated Quantity		

Exhibit C

Cost Proposal Templates

The proposer shall prepare detailed unit cost forms for mobile radios, portable radios, control stations, and training based upon the cost proposal templates outlined in this Exhibit. Equipment prices shall include all costs for engineering, manufacturing, delivery, programming, installation, testing, and warranty necessary for complete and operationally compatible subscriber units as specified in Exhibit B.

1. Mobile Radios

Provide unit cost data as applicable for the low, mid, and high tier mobile radios using the following template as a guide.

DESCRIPTION	UNIT COST
_____ Tier Mobile Radio	
Mobile Radio Unit (Including 3 Year Warranty)	
Software	
Control Head	
Microphone, Speaker, and Antenna	
Other Accessories (List)	
Programming, Training, and Training Materials	
Delivery and Standard Dash Mount Installation	
Total Unit Cost	
List Separately Each Software Option	
List Separately Each Control Head Option	
List Separately Each Microphone, Speaker, and Antenna Option	
List Separately Other Options and Accessories	
Option for Remote Mount Installation	
Option for Existing Radio Unit Removal	
List Separately Cost for Special Installations/Removals (e.g. Fire Truck, Ambulance, Mobile Command Unit, etc.)	
Train the Trainer	

2. Portable Radios

Provide unit cost data as applicable for the low, mid, and high tier portable radios using the following template as a guide.

DESCRIPTION	UNIT COST
_____ Tier Portable Radio	
Portable Radio Unit (Including 3 Year Warranty)	
Software	

Programming, Delivery, Distribution, Training, and Training Materials	
Microphone, Speaker, and Antenna	
Other Accessories (List)	
High Capacity Batteries (2)	
Rapid Rate Desk Charging Unit	
Total Unit Cost	
Gang Charging Unit	
List Separately Each Software Option	
List Separately Each Microphone, Speaker, and Antenna Option	
List Separately Other Options, Batteries, and Accessories	
Train the Trainer	

3. Control Station Radios

Provide unit cost data as applicable for the low and high tier control station radios using the following template as a guide.

DESCRIPTION	UNIT COST
_____ Tier Control Station Radio	
Control Station Radio Unit (Including 3 Year Warranty)	
Software	
Programming, Training, and Training Materials	
Control Head	
Microphone and Speaker	
Antenna System	
Power Supply and Cable	
Other Accessories (List)	
Delivery and Installation	
Total Unit Cost	
List Separately Each Software Option	
List Separately Each Control Head Option	
List Separately Each Microphone and Speaker Option	
List Separately Each Antenna System Option	
List Separately Other Options and Accessories	
Train the Trainer	